

GENERIC · POWERTRAIN

P0CF8

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0CF8

Control Pilot Charging Switch A Circuit/Open

P0CF8 indicates that the powertrain control module has detected an open circuit in the control pilot charging switch A circuit, which is part of the electric vehicle supply equipment communication path. The computer expects a specific voltage or continuity on this circuit when the vehicle is plugged in, and it is seeing a missing or out-of-range signal instead.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Professional	Hybrid propulsion

Symptoms you may notice

- The vehicle may fail to start charging when connected to a charging station.
- The charging port indicator light may not illuminate or may flash an error pattern.
- A warning message such as 'Check Charging System' or 'Unable to Charge' appears on the dashboard.
- The vehicle may refuse to enter 'ready to drive' mode after a charging session.
- Often no symptoms besides the warning light, especially if the fault is intermittent.

Common causes, most likely first

- A broken or corroded wire in the control pilot circuit between the charge port and the charging control module.
- A faulty charging switch or its internal contacts within the charge port assembly.
- Water intrusion or contamination in the charge port connector causing an open circuit.
- A loose or disconnected electrical connector at the charging control module or charge port.
- A failed charging control module that cannot interpret the pilot signal.
- Damage to the charge port pins from repeated insertion or physical impact.

How to diagnose and fix it

- Inspect the charge port and connector for corrosion, debris, or bent pins, and clean or replace as needed.
- Check the control pilot circuit wiring for continuity and shorts using a digital multimeter, following the manufacturer's wiring diagram.
- Verify that all connectors in the control pilot path are fully seated and free of corrosion.
- Test the charging switch for proper operation by measuring resistance across its terminals while actuating it.
- If the switch or charge port assembly is faulty, replace the affected component.
- Clear the diagnostic trouble code and perform a charging system test to confirm the repair.
- If the code persists after all external checks, diagnose or replace the charging control module as the last step.



Control Pilot Circuit Checks Before Parts

- A common oversight is assuming the charging station is at fault when the open circuit is actually inside the vehicle's charge port or wiring harness.
- The control pilot circuit carries a low-voltage pulse-width modulated signal, so a standard test light is not suitable; use a digital multimeter or oscilloscope.
- Intermittent open circuits often occur at the charge port pins due to wear, and the code may only set when the vehicle is plugged in and the circuit is flexed.
- Some vehicles will set this code if the charging switch is stuck open, but the switch may test fine when cold and fail only when warm, so test both cold and after a charging attempt.
- The code does not always mean the charging control module is defective; wiring and connector issues are far more common and should be ruled out first.

Can I keep driving with P0CF8?

The vehicle may be safe to drive because the fault affects charging, not propulsion, but avoid relying on charging until the fault is repaired. Do not attempt to bypass or modify the control pilot circuit, as it is a safety-critical communication link.

Tools that help

- Digital multimeter
- Oscilloscope
- Manufacturer-specific diagnostic scan tool
- Wiring diagram for the control pilot circuit
- Terminal pick and electrical contact cleaner

Reading P0CF8

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
C	Hybrid propulsion.
F8	The exact fault within that area.

Often seen with

P0CF7 Control Pilot Circuit Intermittent/Erratic · **P0CF9** Control Pilot Charging Switch A Range/Performance · **P0CFA** Control Pilot Charging Switch A Circuit Low · **U0111** Lost Communication With Battery Energy Control Module 'A'



See it working

Watch the animated explainer [How a Boxer Engine Works: Flat Engine Cutaway](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0cf8/>

